



Draft Landfill Methane Control Measure

Landfill Technical Review Workgroup Conference Call
December 10, 2008

Presentation Overview

- Major Revisions
- Scope of the Measure
- Discussion Items
- Next Steps
- Questions

ARB Proposed Control Measure

Major Revisions

- Applicability
- Exemption Conditions
- Surface Emissions Monitoring Requirements

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ARB Proposed Control Measure

Major Revisions (Cont.)

- Calculations to Determine Landfill Gas Heat Input Capacity
- Time Requirement for Installing GCCS at Closed or Inactive MSW Landfills
- Cover Integrity Monitoring

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ARB Proposed Control Measure

Major Revisions (Cont.)

- Component Leak Testing Standard
- Methane Outlet Concentration for Lean Burn Engines

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ARB Proposed Control Measure

Scope of the Measure

- Affects all MSW landfills that received waste after January 1, 1977
- $\geq 450,000$ tons of WIP
 - Install a gas collection and control system, unless exemption requirements are met
 - Comply with statewide standards
- $< 450,000$ tons of WIP
 - Must comply with specified reporting requirements

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ARB Proposed Control Measure

Scope of the Measure

- Exemption allowed if owner or operator can demonstrate:
 - Landfill gas heat input capacity of < 3.0MMBtu/hr; and
 - Meets specified reporting requirements

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ARB Proposed Control Measure

Scope of the Measure (cont.)

- Prepare a Design Plan subject to approval (12 months)
- Install and operate GCCS 18 months after approval of Design Plan; 30 months for closed or inactive MSW landfills
- Flexible control options including enclosed flares and landfill gas-to-energy facilities
- Open flares allowed only under temporary conditions

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ARB Proposed Control Measure

Scope of the Measure (Cont.)

- Performance Based Standards
 - 500 ppm instantaneous surface methane emission limit
 - 25 ppm integrated surface methane emission limit
 - 500 ppm component leak limit
 - Higher destruction efficiencies for gas control devices

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ARB Proposed Control Measure

Scope of the Measure (Cont.)

- Surface Monitoring
 - Quarterly surface emission measurements for active landfills
 - Quarterly surface emission measurements reduced to annual (if in compliance) for inactive or closed landfills, or areas of active landfills that are closed or inactive
 - 25-foot walking pattern spacing increased to 100-foot spacing (if in compliance)

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Discussion Items

- Implementation and Enforcement of the Draft Control Measure
- Economic Analysis
 - Examine Incremental Cost of Compliance
 - Monitoring, Recordkeeping, and Reporting Costs
 - Control Cost Scenarios
 - Estimate Number of Landfills That Will Move In or Out of Compliance in Near Future
 - Other Costs

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Next Steps

- Continue to work with stakeholders
- Late February 2009 – Staff Report available for a 45-day formal public review and comment period
- April 2009 – Air Resources Board hearing to consider control measure adoption
- Fall 2009 – Anticipated effective date of the control measure

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Landfill Methane Control Measure Website:
<http://www.arb.ca.gov/cc/landfills/landfills.htm>



Questions about the Draft Landfill Methane Control Measure?

